



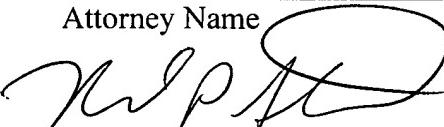
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jae-Ryung Lee et al.
Serial No. : 09/914,440 Examiner : Uhlir, Nikolas J.
Filed : August 27, 2001 Group Art Unit : 1773
For : RESIN-COATED STEEL FOR FUEL TANKS OF AUTOMOBILE AND
METHOD FOR MANUFACTURING THE SAME

TERMINAL DISCLAIMER

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to:
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Neil Sirota
Attorney Name

Signature

38,306
PTO Registration No.

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Date of Signature

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Dear Sir:

Pohang Iron & Steel Co., Ltd., the owner of the entire interest in U.S. Application Serial No. 09/914,440 filed on August 27, 2001 for "RESIN-COATED STEEL FOR FUEL TANKS OF AUTOMOBILE AND METHOD FOR MANUFACTURING THE SAME" by assignment recorded in the United States Patent and Trademark Office at Reel 012275, Frame 0785, hereby disclaims, except as provided below, the terminal part of the term of any patent

granted on the above-captioned application Serial No. 09/914,440 that would extend beyond the expiration date of commonly owned U.S. Patent No. 6,387,538, and hereby agrees that any patent so granted on the above-captioned application shall be enforceable only for and during such period that the legal title to such patent so granted shall be the same as the legal title to U.S. Patent No. 6,387,538.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the above-captioned application that would extend beyond the expiration date of U.S. Patent No. 6,387,538, in the event that U.S. Patent No. 6,387,538 later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR § 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

The undersigned has the authority to execute this Terminal Disclaimer on behalf of Pohang Iron & Steel Co., Ltd., has reviewed the above-referenced assignment, and hereby certifies that, to the best of his knowledge and belief, title is in the assignee on whose behalf this terminal disclaimer is being filed. This agreement shall run with any patent granted on the above-identified application and shall be binding upon the assignee, its successors or assigns.

Respectfully submitted,

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United States Court of Appeals,
Federal Circuit.

GAMBRO LUNDIA AB, Plaintiff-Appellant,
v.
BAXTER HEALTHCARE CORPORATION
Defendant/Cross-Appellant.

Nos. 95-1530, 96-1004.

April 8, 1997.

Patentee brought action against competitor, alleging infringement of its patent for recalibrating sensors during kidney dialysis to accurately measure impurities removed from patient's blood. The United States District Court for the District of Colorado, Jim R. Carrigan, J., ruled that patent was invalid, and patentee appealed. The Court of Appeals, Rader, Circuit Judge, held that: (1) patent was not invalid on grounds of derivation; (2) patent was not invalid as obvious; and (3) patent was not invalid on grounds of inequitable conduct.

Reversed.

West Headnotes

[1] Patents ↗324.55(1)
291k324.55(1) Most Cited Cases

Court of Appeals reviews finding of derivation in patent case as question of fact; this requires acceptance of district court's findings unless clearly erroneous or predicated on improper legal foundation.

[2] Patents ↗90(7)
291k90(7) Most Cited Cases

To show derivation, party asserting invalidity of patent must prove both prior conception of invention by another and communication of that conception to patentee.

[3] Patents ↗324.5
291k324.5 Most Cited Cases

Court of Appeals reviews determination of prior conception, which must be proven by facts supported by clear and convincing evidence, as question of law

based on underlying factual findings.

[4] Patents ↗312(6)
291k312(6) Most Cited Cases

Inventor's testimony, standing alone, is insufficient to prove conception of invention; conception requires corroboration of inventor's testimony.

[5] Patents ↗312(6)
291k312(6) Most Cited Cases

Inventor's written proposal while working for patentee's predecessor was insufficient to corroborate inventor's testimony that he had conceived of invention that recalibrated sensors during kidney dialysis to accurately measure impurities removed from patient's blood, as required to support derivation defense in infringement case; proposal did not expressly state concept of recalibration during dialysis, and would have contained more than single sentence memorializing invention had such important invention been conceived. 35 U.S.C.A. § 102(f).

[6] Patents ↗90(7)
291k90(7) Most Cited Cases

Inventor's communication of invention to patentee was required to enable one of ordinary skill in the art to make patented invention for patent to be invalid on grounds of derivation; communication of so much of invention as to make it obvious to one of ordinary skill in the art was insufficient. 35 U.S.C.A. §§ 102(f), 103.

[7] Patents ↗312(6)
291k312(6) Most Cited Cases

Evidence was insufficient to establish that alleged inventor communicated sufficient information to patentee to make patent for device that recalibrated sensors during kidney dialysis to accurately measure impurities removed from patient's blood invalid for derivation; patentee acquired alleged inventor's written proposal at time it acquired his employer, but proposal did not disclose recalibration during dialysis to one skilled in the art at the relevant time. 35 U.S.C.A. § 102(f).

[8] Patents ↗324.5
291k324.5 Most Cited Cases

Court of Appeals reviews ultimate determination of obviousness *de novo*; this ultimate determination,

however, requires underlying factual findings, which Court of Appeals examines for clear error. 35 U.S.C.A. § 103.

[19] Patents  16.33
291k16.33 Most Cited Cases

Patent for recalibrating sensors during kidney dialysis to accurately measure impurities removed from patient's blood was not obvious in light of prior art; there was no suggestion in prior art to substitute computer-controlled valves for systems of hoses in prior art, alleged infringer recognized calibration during dialysis was significant advance, patented invention achieved commercial success, and those skilled in the art had tried unsuccessfully to solve need for improved accuracy in monitors during dialysis. 35 U.S.C.A. § 103.

[10] Patents  97
291k97 Most Cited Cases

"Inequitable conduct" is failure to disclose material information, or submission of false material information, during prosecution of patent with intent to deceive.

[11] Patents  97
291k97 Most Cited Cases

Reference which merely replicates references already before patent examiner is not material, for purposes of claim of inequitable conduct.

[12] Patents  97
291k97 Most Cited Cases

Finding of inequitable conduct requires proof of intent to deceive; court weighs intent of party in light of all the evidence, including evidence of good faith.

[13] Patents  97
291k97 Most Cited Cases

Quantum of intent evidence necessary for inequitable conduct depends, in part, on materiality of information; in presence of very material omissions or misrepresentations during patent application process, less evidence suffices to show intent.

[14] Patents  324.54
291k324.54 Most Cited Cases

Court of Appeals examines district court's inequitable

conduct finding for abuse of discretion.

[15] Patents  97
291k97 Most Cited Cases

District court's discretionary finding on claim of inequitable conduct cannot rest on clearly erroneous findings of fact or on misunderstanding of law.

[16] Patents  97
291k97 Most Cited Cases

Evidence that patentee, in response to rejection of patent application based on prior art German patent, overstated differences between patented invention and invention covered in German patent was insufficient to establish that patent for recalibrating sensors during kidney dialysis to accurately measure impurities removed from patient's blood was invalid because of inequitable conduct; evidence indicated that overstatements were minor and did not show that patentee exploited its foreign language expertise to deceive patent examiner.

Patents  328(2)
291k328(2) Most Cited Cases

5,585,552. Infringed.

*1574 Willem G. Schuurman, Arnold, White & Durkee, Austin, TX, argued, for plaintiff-appellant. With him on the brief were Michael S. Metteauer and Mark B. Wilson.

Timothy J. Malloy, McAndrews, Held & Malloy, Ltd., Chicago, IL, argued, for defendant/cross-appellant. With him on the brief were Robert C. Ryan, Gregory J. Vogler, and John S. Artz. Of counsel on the brief was Charles R. Mattenson, Baxter International, Inc., McGaw Park, IL.

Before ARCHER, Chief Judge, LOURIE, and RADER, Circuit Judges.

RADER, Circuit Judge.

In this patent infringement case, Gambro Lundia AB (Gambro) appeals and Baxter Healthcare Corporation (Baxter) cross-appeals a final judgment of the United States District Court for the District of Colorado. The patent at issue, U.S. Patent No. 4,585,552 ('552 patent), claims a "system for the measurement of the

difference between two fluid flows in separate ducts." This invention recalibrates sensors during hemodialysis to accurately measure the impurities removed from a patient's blood. Due to error in the district court's analyses of invalidity, unenforceability, and infringement, this court reverses.

BACKGROUND

Hemodialysis, commonly called dialysis, removes contaminants and excess fluid from the patient's blood when the kidneys do not function properly. Hemodialysis works by passing a dialysate solution through a machine, called a dialyzer, which functions as an *1575 artificial kidney. In the dialyzer, the dialysate passes on one side of a porous diffusion membrane, while the patient's blood passes on the other side. Because of the pressure differential across the membrane, blood contaminants and excess fluid diffuse through the membrane from the patient's blood into the dialysate. These impurities diffused from the patient's blood are known as ultrafiltrate.

After hemodialysis, the volume of the dialysate is greater. The difference between the initial and end volumes of dialysate can be used to calculate the amount of the ultrafiltrate removed from a patient's blood. This calculation is critical to the success of hemodialysis. Removal of too much or too little ultrafiltrate may lead to severe medical problems or even death.

Repgreen Limited (Repgreen), a British bioengineering company, improved ultrafiltrate calculation. Keith Wittingham, Repgreen's chief designer, introduced the Repgreen monitoring system, the UFM 1000, in late 1977. Wittingham's development relied on the research of Professor Michael Sanderson. The UFM 1000 used two electromagnetic flow sensors to measure the difference between the rate of dialysate flow into and out of the dialyzer. The difference in flow rates indicated the quantity of ultrafiltrate leaving the system. To calibrate the system for an accurate measurement of dialysate flow rates, the operator would direct clean dialysate through both sensors before dialysis. This calibration method, however, could not account for clogging in the outflow sensor during dialysis. Over time, the ultrafiltrate would build up behind the outflow sensor and disrupt the accuracy of the measurements. Experts refer to this increasing inaccuracy as "drift."

In the late 1970s, Gambro sought to improve

ultrafiltrate monitoring. During 1979, Wittingham met with Gambro engineers on two occasions to discuss Repgreen's development of an ultrafiltrate monitor for Gambro. In July 1979, after Repgreen went bankrupt, Gambro purchased Repgreen's hemodialysis technology, including the rights to the UFM 1000 monitor. After acquiring Repgreen's technology, Gambro's research team worked for three years on improving ultrafiltration monitors. In June 1982, four Gambro engineers, including Bengt-Ake Gummesson, refined the monitoring system. Their invention ultimately issued as the '552 patent.

Gambro filed its initial patent application in Sweden on September 28, 1982. Gambro followed up with a U.S. application in September 1983. Gunnar Boberg, Repgreen's in-house patent counsel, and Arnold Krumholz, Repgreen's U.S. patent counsel, prosecuted the U.S. application. The examiner rejected claim 1 as anticipated by a German patent application (German '756). In response, Gambro provided the examiner with a German-language copy of German '756, along with arguments prepared by Boberg (who is fluent in German). Based on this submission, the examiner withdrew the rejection. The '552 patent issued on April 29, 1986.

The Gambro invention uses valves to direct clean dialysate around the dialyzer to recalibrate the sensors during dialysis. The invention's valve system can direct clean dialysate through the first flow sensor, around the dialyzer, and through the second flow sensor. To recalibrate, the invention momentarily blocks passage of contaminated dialysate through the outflow sensor. Instead, clean dialysate flows through the outflow sensor and recalibrates the detectors with the same clean dialysate flowing through both intake and outflow sensors. After the brief recalibration, the hemodialysis continues with contaminated dialysate flowing through the second sensor. Claim 1 of the '552 patent reads:

- [1] In dialysis equipment including a dialyser, a system for measuring the difference in the rate of flow between first and second fluid streams, said first fluid stream comprising clean dialysis solution flowing to the dialyser and said second fluid stream comprising spent dialysis solution flowing from the dialyser, said system comprising
- [2] a first duct for receiving said first fluid stream flowing therethrough,
- [3] a second duct for receiving said second fluid stream flowing therethrough,
- [4] measuring means for measuring the difference in the rate of flow between said *1576 first and

second fluid streams within said first and second ducts,
[5] and transferring means for preventing the flow of said second fluid stream through said second duct while flowing said first fluid stream through both said first and second ducts without passing said first fluid stream through the dialyser and without altering said rate of flow of said first fluid stream between said first and second ducts such that said rate of flow of said first fluid stream through said first and second ducts is substantially equal,
[6] whereby the measured difference of the rate of flow of said first fluid stream flowing through said first and second ducts is adaptable as a reference.

(Paragraph enumeration added.)

In 1984, Baxter acquired the dialysis equipment division of Extracorporeal, Inc. Dissatisfied with the accuracy of the Extracorporeal technology, Baxter developed the Baxter SPS 550 and began marketing the device in December 1987. Gambro filed suit against Baxter in the District Court for the District of Colorado in March 1992 claiming the Baxter SPS 550 infringed the '552 patent. In defense, Baxter asserted the invalidity and unenforceability of the '552 patent.

After a ten-day bench trial on the issues of infringement, validity, and unenforceability, the district court held claim 1 of the Gambro '552 patent invalid for obviousness and derivation, and unenforceable for inequitable conduct. The district court also entered judgment in favor of Baxter on infringement, contributory infringement, inducing infringement, and willful infringement due to the invalidity and unenforceability of the '552 patent. Further, the district court declined to award either party attorney fees or costs.

DISCUSSION

I. Derivation

[1][2][3] The trial judge found that Gambro had derived the '552 invention from a Wittingham proposal left in the files when Gambro acquired Repgreen's dialysis technology. This court reviews a finding of derivation as a question of fact. Price v. Symsek, 988 F.2d 1187, 1190, 26 USPQ2d 1031, 1033 (Fed.Cir.1993). This requires acceptance of the district court's findings unless clearly erroneous or predicated on an improper legal foundation. Raytheon Co. v. Roper Corp., 724 F.2d 951, 956, 220 USPQ 592, 596 (Fed.Cir.1983). To show derivation,

the party asserting invalidity must prove both prior conception of the invention by another and communication of that conception to the patentee. Price, 988 F.2d at 1190. This court reviews a determination of prior conception, which must be proven by facts supported by clear and convincing evidence, as a question of law based on underlying factual findings. Id. at 1190-92.

[4] Turning first to conception, the district court found that Wittingham had conceived the invention no later than July 1979. The court based this finding on Wittingham's testimony and the Wittingham proposal left in the Repgreen file. Although the district court found Wittingham highly credible, an inventor's testimony, standing alone, is insufficient to prove conception. See Price, 988 F.2d at 1194. Conception requires corroboration of the inventor's testimony. Id.

[5] Thus, this court must weigh whether the Wittingham proposal, prepared in 1979, corroborates Wittingham's testimony of conception. The proposal is a four-page document alluding to an ultrafiltration monitor with valves that automatically zero the sensors upon start-up. The proposal briefly discusses the Auto Zero/Start feature:

To ensure ease of operation the process of shunting the kidney in order to zero monitor will be done automatically on pressing of the start button. This will also initiate the automatic zeroing of unit.

Baxter contends that this document also discloses the concept of recalibration (or zeroing) during dialysis. In support of this contention, Baxter identifies the following passage from the proposal:

A zero button may also be necessary in order to zero Ultrafiltration Monitor but not start the automatic control (start signal cannot be allowed till 20 minutes after switch on?).

Baxter argues that the only reason to zero the monitor without starting the automatic control is to zero the monitor when it is *1577 already started--in other words, during dialysis.

Baxter's novel interpretation of this single ambiguous passage in the Wittingham proposal, however, lacks sufficient support to corroborate Wittingham's conception testimony. First, the reference is so unclear that even Wittingham conceded that this single sentence does not state expressly the concept of recalibration during dialysis. In fact, the parenthetical within the sentence suggests that the device should not be in use "till 20 minutes

after switch on." For this reason, among others, Professor Sanderson, an expert in dialysis whose early research formed the basis of Wittingham's work, testified that one of ordinary skill in dialysis in 1982 would not have understood this obscure passage to disclose recalibration during dialysis. Professor Sanderson noted that the Repgreen monitor needed twenty minutes to stabilize before use. Therefore, this obscure sentence more reasonably suggests the use of the zero button during the pre-dialysis warm-up period.

In addition, the obscure sentence states that depressing the button calibrates the monitor, but does "not start the automatic control." In its ordinary start-up operation, the Repgreen monitor would calibrate the monitor, start the automatic control, and finally automatically begin the dialysis. The reference to "zeroing" before the automatic control phase thus suggests calibration before dialysis, not during dialysis. Further, if Wittingham had conceived of recalibration during dialysis--an important advance in the dialysis art--the four-page Wittingham proposal would surely contain more than a single cryptic sentence memorializing the advance. Accordingly, this court determines that the Wittingham proposal does not corroborate conception.

The only other evidence offered by Baxter to corroborate conception is the testimony of Mr. Smith, Wittingham's supervisor at Repgreen. Referring to the ambiguous sentence, Smith testified that the Wittingham proposal included the idea of calibration during dialysis. The trial judge, however, did not rely on this self-serving testimony in finding prior conception. Moreover, as noted above, the language of the Wittingham proposal itself belies Smith's testimony about calibration during dialysis. In sum, this court concludes that Baxter failed to meet its burden of proving by facts supported by clear and convincing evidence that Wittingham conceived the invention of the '552 patent.

[6] The second prong of the derivation test--communication of the prior conception to the named inventor--poses similar difficulties for Baxter. As an initial matter, the district court applied the wrong legal standard. Citing *New England Braiding Co. v. A.W. Chesterton Co.*, 970 F.2d 878, 23 USPQ2d 1622 (Fed.Cir.1992), the district court concluded that Baxter did not need to prove communication of the entire conception, but rather only so much of the invention "as would have made it obvious to one of ordinary skill in the art." *Gambro Lundia AB v.*

Baxter Healthcare Corp., 896 F.Supp. 1522, 1540 (D.Colo.1995) (citing *New England Braiding*, 970 F.2d at 883). Based on this reasoning, the district court applied the obviousness standard in 35 U.S.C. § 103 (1994) to determine that the named inventors received enough information to make the invention obvious to one skilled in the dialysis art. This reasoning, however, misconstrues the dictum in *New England Braiding* and introduces incorrectly an obviousness analysis into the test for derivation.

The Supreme Court announced the standard for finding communication of a prior conception over 125 years ago in *Agawam Woolen v. Jordan*, 74 U.S. (7 Wall.) 583, 19 L.Ed. 177 (1868). The Court required a showing that the communication "enabled an ordinary mechanic, without the exercise of any ingenuity and special skill on his part, to construct and put the improvement in successful operation." *Id.* 74 U.S. at 602-03 (emphasis added). This court's predecessor consistently applied this Supreme Court standard. See, e.g., *Hedgewick v. Akers*, 497 F.2d 905, 908, 182 USPQ 167, 169 (CCPA 1974) ("Communication of a complete conception must be sufficient to enable one of ordinary skill in the art to construct and successfully operate the invention.") (emphasis added); *DeGroff v. Roth*, 56 C.C.P.A. 1331, 412 F.2d 1401, 1405, 162 USPQ 361, 365 (CCPA 1969).

*1578 This court recognizes that the district court's incorrect derivation standard springs from dictum in this court's *New England Braiding* decision. In that case, this court noted: "To invalidate a patent for derivation of invention, a party must demonstrate that the named inventor in the patent acquired knowledge of the claimed invention from another, or at least so much of the claimed invention as would have made it obvious to one of ordinary skill in the art." *New England Braiding*, 970 F.2d at 883. This dictum did not in fact incorporate a determination of obviousness into a Section 102(f) analysis. Indeed, this court in *New England Braiding* did not apply such a test.

The *New England Braiding* court upheld the denial of a preliminary injunction because the record showed a likelihood that New England Braiding's patent was invalid under 35 U.S.C. § 102(f). The record showed that George Champlin, the named inventor, worked for the A.W. Chesterton Co. (Chesterton) and participated in experiments that developed the invention. One Chesterton employee testified that Champlin had said, when he left to start his own company, that he wanted to patent the experimental braiding if Chesterton decided not to do

so. Champlin denied these allegations. *Id.* at 883-84. The key issue was a credibility determination between the witnesses for the two parties. The sufficiency of the communication, particularly whether the invention was obvious in light of such disclosure, was not at issue. Thus, *New England Braiding* did not incorporate an obviousness test into the § 102(f) analysis.

[7] Applying the correct standard--whether the communication enabled one of ordinary skill in the art to make the patented invention--this court discerns insufficient evidence of communication. Wittingham testified that he was not sure that he had discussed calibration during dialysis with anyone at Gambro, and he did not discuss the sensor contamination problem. The trial judge based his finding of communication solely on Wittingham's written proposal. Gambro acquired this document when it acquired Repgreen's technology. During discovery, the proposal appeared in the files of one of the named inventors. However, as discussed above, the proposal does not disclose recalibration during dialysis to one skilled in the art at the relevant time. If the proposal does not disclose recalibration during dialysis, it cannot serve as the basis for a communication of that idea. Thus, under the correct legal standard, the record evidence is insufficient to support a finding of communication. The district court erred in finding communication and conception, and, hence, the finding of derivation is also clearly erroneous.

Because this court reverses the district court's ruling of invalidity based on derivation, it need not reach the issue of correction of inventorship under 35 U.S.C. § 256 (1994).

II. Obviousness

[8] This court reviews the ultimate determination of obviousness *de novo*. See *In re Donaldson Co.*, 16 F.3d 1189, 1192, 29 USPQ2d 1845, 1848 (Fed.Cir.1994). This ultimate determination, however, requires underlying factual findings, which this court examines for clear error. See *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S.Ct. 684, 693-94, 15 L.Ed.2d 545 (1966); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050, 5 USPQ2d 1434, 1438 (Fed.Cir.1988).

[9] The district court determined that the prior art embodied each of the elements of claim 1, with the exception of element five--the "transferring means." Specifically, the court found that the prior art,

including the UFM 1000, the DM 358, and the German '756 patent, differed from the Gambro invention only in the absence of computer controlled valves to recalibrate the flow sensors during dialysis. The record amply supports these findings.

Thus, the key obviousness question is whether the prior art would teach one of ordinary skill in this art to employ valves for recalibration during dialysis. The district court found that those skilled in the art were clearly aware of the possibility of recalibrating during dialysis, and that substituting a system of computer-controlled valves for the system of hoses in the UFM 1000 and the DM 358 was obvious to those skilled in the art at the time of invention. However, the *1579 record must provide a teaching, suggestion, or reason to substitute computer-controlled valves for the system of hoses in the prior art. The absence of such a suggestion to combine is dispositive in an obviousness determination. See *SmithKline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 886-87, 8 USPQ2d 1468, 1475 (Fed.Cir.1988).

The trial judge found that the Gray and Sanderson article, *Precision Differential Fluid Flow Measurement*, "clearly suggests using a valve system to bypass or detour clean dialysate around the dialyzer during the course of a dialysis treatment." The record evidence does not support this finding. Sanderson himself testified that his article did not disclose the use of valves to bypass the dialyzer, but actually taught away from that solution. Rather than recalibration by rerouting the clean dialysate through valves around the dialyzer during dialysis, Sanderson testified that his clinical device rerouted spent dialysate, which has passed through the dialyzer, through both the inflow and outflow sensors. Sanderson testified that this configuration was necessary because it was a medical requirement to maintain the flow of dialysis fluid through the dialyzer. Thus, Sanderson testified that his article taught away from recalibration during dialysis by bypassing the dialyzer.

The Gray and Sanderson article supports this testimony. The article and the clinical trials teach that stopping the fluid flow through the dialyzer for recalibration during dialysis is not possible. The article states: "As it was not possible during dialysis therapy to stop the fluid transfer and thus re-establish the zero base line, a series of valves were inserted around the flowmeter to enable the flow to be changed to a zero differential flow configuration while at the same time maintaining dialysis."

Further, the article explains that because it was not possible to bypass the dialyzer during dialysis, "[t]he only solution appeared to lie in the adoption of a differential measurement technique where any signal due to the true differential flow could be effectively isolated from that due to the very much larger common mode signal." Thus, Sanderson's use of the valves to direct spent dialysis through both sensors facilitated a proper baseline for testing the accuracy of the improved sensor. Contrary to the district court's finding, the Gray and Sanderson article teaches away from the use of valves to recalibrate during dialysis by bypassing the dialyzer. Without a suggestion or teaching to combine, Baxter's case of obviousness suffers a significant deficiency.

In addition, the district court did not evaluate fully the fourth prong of the obviousness determination--the objective indicia of nonobviousness. These objective indicia, when present, are invariably relevant to a determination under Section 103. See Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed.Cir.1983). These objective indicia "may often be the most probative and cogent evidence [of nonobviousness] in the record." Id.

The district court rejected the evidence of long-felt need and declined to address any other consideration. Several objective indicia, however, warrant consideration in this case. For instance, before this litigation, Baxter recognized calibration during dialysis as a significant advance. Baxter touted the advantages of AUTO-ADJUST, as it termed automatic recalibration during dialysis, in the advertising for the allegedly infringing Baxter SPS 550 machines. Baxter's recognition of the importance of this advance is relevant to a determination of nonobviousness. See Allen Archery, Inc. v. Browning Mfg. Co., 819 F.2d 1087, 1092, 2 USPQ2d 1490, 1493 (Fed.Cir.1987).

Additionally, the record contains significant evidence of the commercial success of Gambro's invention. The record shows that Baxter sold over 14,800 dialysis machines allegedly incorporating the Gambro invention since 1987. In fact, Baxter admits that its machines were a commercial success. Of course, the record must show a sufficient nexus between this commercial success and the patented invention. See Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1394, 7 USPQ2d 1222, 1226 (Fed.Cir.1988). The prominence of the patented technology in Baxter's advertising creates an inference that links the Gambro invention to this

success.

Finally, the record also suggests that others in this market had tried to solve the need for improved accuracy of the ultrafiltration *1580 monitors. The record reflects that those skilled in the art tried numerous, ultimately unsuccessful, solutions--improving the electronics, improving the flowmeter technology, and recalibrating before dialysis. This objective consideration also supports a conclusion of nonobviousness. See Graham, 383 U.S. at 17-18, 86 S.Ct. at 693-94; Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1574-75, 24 USPQ2d 1321, 1333-34 (Fed.Cir.1992).

In sum, the record supplies objective evidence of nonobviousness, including Baxter's recognition of the importance of this invention, evidence of commercial success, and evidence of the failure of others to solve the recognized problem. This objective evidence, combined with the lack of a teaching or suggestion to combine, requires a holding of nonobviousness.

III. Inequitable Conduct

[10][11][12][13] Inequitable conduct is the failure to disclose material information, or the submission of false material information, during prosecution of a patent with an intent to deceive. See Kingsdown Med. Consultants Ltd. v. Hollister Inc., 863 F.2d 867, 872, 9 USPQ2d 1384, 1389 (Fed.Cir.1988) (in banc). Under the then relevant standard, information is material if a reasonable examiner would consider the omission or misrepresentation important in deciding whether to issue the patent. See Fox Indus., Inc. v. Structural Preservation Sys., Inc., 922 F.2d 801, 803, 17 USPQ2d 1579, 1580 (Fed.Cir.1990). A reference which merely replicates references already before the examiner, however, is not material. See Halliburton Co. v. Schlumberger Tech. Corp., 925 F.2d 1435, 1440, 17 USPQ2d 1834, 1839 (Fed.Cir.1991). A finding of inequitable conduct also requires proof of intent to deceive. Id. at 1442. The court weighs the intent of the party in light of all evidence, including evidence of good faith. Kingsdown, 863 F.2d at 876 (in banc). The quantum of intent evidence necessary for inequitable conduct depends, in part, on the materiality of the information. In the presence of very material omissions or misrepresentations, less evidence suffices to show intent. See Halliburton, 925 F.2d at 1439.

[14][15] This court examines a district court's inequitable conduct finding for abuse of discretion.

See Merck & Co. v. Danbury Pharmacal, Inc., 873 F.2d 1418, 1420, 10 USPQ2d 1682, 1685 (Fed.Cir.1989). The district court's discretionary finding cannot rest on clearly erroneous findings of fact or on a misunderstanding of the law. *See Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 551, 16 USPQ2d 1587, 1592 (Fed.Cir.1990) (citing *Kingsdown*, 863 F.2d at 872). The trial judge found that Gambro made fatal misrepresentations to the Patent and Trademark Office about the German '756 patent. This court rejects that finding as an abuse of discretion.

[16] As discussed above, the examiner rejected Gambro's patent application after his initial examination as anticipated by the German '756 patent. [FN*] The German '756 patent discloses a dialysis system with a flowmetric ultrafiltrate measurement. This system manually connects a temporary hose between the intake and outflow sensors (in the position the dialyzer would occupy) to pass the same flow by both sensors. The German '756 patent does not disclose any way to mount the hose and the dialyzer into the dialysis circuit at the same time. Therefore, unlike the patent at issue, the German '756 does not disclose any means for calibrating during dialysis nor any means for preventing the flow of spent dialysis solution through the downstream sensor. Without a "transferring means" recited by the '552 patent to recalibrate during dialysis, the German '756 patent does not anticipate the patented invention.

FN* Although the German '756 is arguably cumulative prior art over the British Pat. No. 2,003,274 (the Repgreen '274), which was cited in the Gambro patent application, there can be little argument that the German '756 was not material. At the time of these statements, the Gambro patent application had been rejected as anticipated by the German '756. Statements made in answer to this office action are, therefore, material.

In response to this rejection, however, Gambro amended claim 1 as follows: "transferring means for preventing the flow of said second fluid through said second duct while transferring the flow of the first fluid to said second duct." In distinguishing the amended claims over the German '756, Gambro stated:

*1581 In the same way, the measuring cell 9 [of the German '756 patent] is at all times influenced

only by the contaminated dialysis solution.... At no time does the German patent transfer the clean dialysis solution, i.e., the first fluid, through the second measuring cell 9, while preventing the flow of the contaminated dialysis solution, i.e., the second solution, from flowing therethrough.

... As noted, the German patent is totally void of any suggestion of providing a dialyzer where the clean dialysis solution is permitted to flow through both the first and second ducts of the measuring cell.

The district court construed these statements as misrepresentations:

I agree that Gambro misrepresented to the patent examiner the teachings of the German patent. Gambro informed the patent examiner that the German patent does not teach a method for transferring clean dialysis solution to the second flow sensor "while preventing the flow of the contaminated solution" to that flow sensor. However, the German '756 patent clearly discloses a means by which a hose can be inserted in place of the dialyzer in order to direct clean dialysate through both the first and second flow sensors. As stated the German '756 patent thus describes a method for transferring the same stream of clean dialysate through both the first and second flow sensors. Further, because the hose directs only clean dialysate through the second flow sensor, the German '756 patent discloses a means for preventing the flow of contaminated dialysis solution through the second flow sensor. Thus, Gambro's statement to the patent examiner that the German '756 patent does not disclose a means to "transfer the clean dialysis solution ... through the second measuring cell 9, while preventing the flow of the contaminated dialysis solution ... from flowing therethrough," misrepresented the German '756 patent's teachings.

(Citations to record omitted.)

This court notes that some of Gambro's responses are at least over-statements. The German reference's down-stream measuring cell is not "*at all times* influenced only by contaminated dialysis solution" as the district court correctly noted. Nor is it always accurate that "*at no time* does the German patent transfer the clean dialysis solution ... through the second measuring cell." Instead these statements are only correct in the context of an ongoing dialysis process with a dialyzer, not the hose system, completing the circuit. Of central import, however, is a lack of disclosure in the German reference for

bypassing the dialyzer during dialysis, and no disclosure of any means for preventing the flow of spent dialysis solution through the downstream sensor during dialysis. Thus, while Gambro's statements apply during actual dialysis, they are overstatements outside that context. Nonetheless, in the context of Gambro's overall effort to show that the German reference does not anticipate its invention, these exaggerations do not rise to the level of gross falsification.

In any event, inequitable conduct also requires a finding of intent to deceive. As discussed above, all evidence--including evidence of good faith--informs this inquiry. *Kingsdown*, 863 F.2d at 876. In light of the tentative and minor overstatements in this record, the evidence of intent must be relatively strong. See *Halliburton*, 925 F.2d at 1439. On this record, however, the evidence of intent is very weak.

First, Gambro had disclosed British Patent No. 2,003,274 (Repgreen '274) which uses the same predialysis hose procedure as the German '756. In the response to the office action, Gambro specifically stated that German '756 "describes a system which corresponds to the system of the prior art mentioned on page 1 of Applicant's specification." Indeed the '552 specification discloses the Repgreen '274. This disclosure of corresponding prior art to the examiner--in English to boot--shows Gambro's good faith.

Further, the examiner himself had located and cited the German '756 patent, and could consult it while evaluating Gambro's comments in response to his office action. The examiner's access to the German and Repgreen references should have helped place Gambro's comments in their proper context.

The district court, however, overemphasized Boberg's, Gambro's in-house patent counsel's, fluency in German. Although the patent examiner relied on Gambro's translations, the process of moving between languages *1582 is not itself sufficient to show that Gambro exploited its foreign language expertise to deceive the examiner. The examiner may request translations throughout the examination process. See Manual of Patent Examining Procedure (MPEP), § 901.05(d) (6th ed.1995).

Finally, the trial judge relied on "Gambro's failure to name Wittingham as the inventor" as corroborating evidence of an intent to deceive. Because Gambro did not derive the '552 invention from Wittingham, this evidence is not available to reinforce an intent to

deceive. Thus, the district court's finding of an intent to deceive rests solely on some exaggerations in Gambro's response to the initial rejection and the language superiority of Gambro's counsel. This evidence does not suffice to show the measure of intent necessary for inequitable conduct in the circumstances of this case. Therefore, this court discerns in the district court's determination of inequitable conduct an abuse of discretion.

IV. Infringement

The district court found that the Baxter SPS 550 literally infringed claim 1 of Gambro's patent. However, because the district court also found the patent invalid and unenforceable, it entered judgment in favor of Baxter on this issue. With its reversal on the invalidity and enforceability grounds, this court also reverses the judgment on the claim of infringement. Thus, Baxter infringes claim 1 of the Gambro '552 patent. Finally, as this court has reversed the district court and found against Baxter on the issues of invalidity, unenforceability, and infringement, Baxter has not and cannot meet its burden of proving that this case is exceptional, nor that the failure to award costs was an abuse of discretion. Thus, this court declines to address those issues.

COSTS

Each party shall bear its own costs.

REVERSED.

110 F.3d 1573, 42 U.S.P.Q.2d 1378

END OF DOCUMENT

Briefs and Other Related Documents

United States Court of Appeals,
Federal Circuit.

WINNER INTERNATIONAL ROYALTY
CORPORATION, Plaintiff-Appellee,
v.
Ching-Rong WANG, Defendant-Appellant.

No. 98-1553.

Jan. 27, 2000.

Rehearing and Rehearing En Banc Denied March 6,
2000.

Owner of patent and patent application claiming automobile anti-theft device brought action challenging decision of the Board of Patent Appeals and Interferences, in interference proceeding, declaring patent and application claims invalid as obvious. Competitor's motion to transfer action to California was denied, 1998 WL 268279. Following bench trial, the United States District Court for the District of Columbia, Stanley Sporkin, J., 11 F.Supp.2d 18, overturned Board's decision, and competitor appealed. The Court of Appeals, Michel, Circuit Judge, held that: (1) owner's submission to district court of live testimony on all matters before the Board required court to conduct trial de novo; (2) patent was not invalid as obvious; (3) allowing allegedly late-disclosed witnesses to testify was not abuse of discretion; (4) evidence regarding nexus between commercial success of claimed invention and patentably distinct feature of invention was admissible; and (5) competitor was not entitled to transfer.

Affirmed.

West Headnotes

[1] Federal Courts 776
170Bk776 Most Cited Cases

[1] Federal Courts 850.1
170Bk850.1 Most Cited Cases

On appeal following a bench trial, Court of Appeals reviews the district court's factual findings for clear error and its conclusions of law de novo.

[2] Patents 114.16
291k114.16 Most Cited Cases

Patent owner's submission to district court of live testimony on all matters before the Board of Patent Appeals and Interferences, in owner's action for review of interference decision, required district court to conduct trial de novo, based both on Board record and the district court evidence. 35 U.S.C.A. § 146.

[3] Patents 114.16
291k114.16 Most Cited Cases

[3] Patents 114.22
291k114.22 Most Cited Cases

The admission of live testimony on all matters before the Board of Patent Appeals and Interferences, in a district court action for review of a decision in an interference proceeding, makes a factfinder of the district court and requires a de novo trial; thus, although the live testimony before the district court might be the same or similar to testimony before the Board in the form of affidavits and deposition transcripts, a district court should still make de novo factual findings, while treating the record before the Board when offered by a party as if it was originally taken and produced in the district court. 35 U.S.C.A. § 146.

[4] Patents 16(1)
291k16(1) Most Cited Cases

[4] Patents 16(2)
291k16(2) Most Cited Cases

[4] Patents 314(5)
291k314(5) Most Cited Cases

Obviousness of a patent claim is a question of law based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the prior art and the claimed invention; and (4) extent of any objective indicia of non-obviousness. 35 U.S.C.A. § 103.

[5] Patents 114.25
291k114.25 Most Cited Cases

[5] Patents 324.55(4)
291k324.55(4) Most Cited Cases

The ultimate determination of obviousness of a patent claim by a district court is reviewed by the Court of Appeals *de novo* while the underlying factual inquiries are reviewed for clear error, regardless of whether Court is reviewing judgment in an infringement suit or judgment in an action for review of an interference proceeding. 35 U.S.C.A. § 103.

[6] Patents ↗ 26(1)
291k26(1) Most Cited Cases

When determination of patent's obviousness is based on multiple prior art references, there must be a showing of some teaching, suggestion, or reason to combine the references. 35 U.S.C.A. § 103.

[7] Patents ↗ 314(5)
291k314(5) Most Cited Cases

Whether motivation to combine prior art references was shown by party asserting that patent was obvious is a question of fact. 35 U.S.C.A. § 103.

[8] Patents ↗ 26(1)
291k26(1) Most Cited Cases

Evidence of a suggestion, teaching, or motivation to combine prior art references in manner rendering patent obvious may flow, *inter alia*, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. 35 U.S.C.A. § 103.

[9] Patents ↗ 36(1)
291k36(1) Most Cited Cases

Although a prior art reference need not expressly teach that the disclosure contained therein should be combined with another, to render a patent invalid as obvious, the showing of combinability, in whatever form, must nevertheless be clear and particular. 35 U.S.C.A. § 103.

[10] Patents ↗ 36(3)
291k36(3) Most Cited Cases

Competitor failed to show motivation or suggestion to combine prior art references disclosing claimed automobile anti-theft device and its feature of self-locking ratcheting mechanism, as required to show *prima facie* case of obviousness, since one of ordinary skill in the art would not have reasonably elected trading benefit of security for that of

convenience, which would result from use of ratcheting mechanism, and reference disclosing invention's other features taught away from the ratcheting mechanism. 35 U.S.C.A. § 103.

[11] Patents ↗ 314(5)
291k314(5) Most Cited Cases

What a prior art reference teaches and whether it teaches toward or away from a claimed invention are questions of fact.

[12] Patents ↗ 16(3)
291k16(3) Most Cited Cases

A prior art reference will "teach away" if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the patent applicant.

[13] Patents ↗ 36.2(5)
291k36.2(5) Most Cited Cases

Where party challenging patent as obvious failed to establish a *prima facie* case of obviousness, patentee was not required to establish objective indicia of non-obviousness, such as commercial success. 35 U.S.C.A. § 103.

[14] Patents ↗ 36.2(9)
291k36.2(9) Most Cited Cases

Even if competitor established *prima facie* proof that patent for automobile anti-theft device was obvious, commercial success of invention overcame other obviousness factors and patent was thus not invalid. 35 U.S.C.A. § 103.

[15] Federal Courts ↗ 823
170Bk823 Most Cited Cases

A district court's decision to admit or exclude evidence at trial is reviewed for abuse of discretion.

[16] Federal Courts ↗ 921
170Bk921 Most Cited Cases

District court could not be deemed to have abused its discretion in allowing allegedly late-disclosed witnesses to testify, absent identification of which witnesses should not have been permitted to testify.

[17] Patents ↗ 36.2(1)
291k36.2(1) Most Cited Cases

Evidence regarding nexus between commercial success of claimed invention and patentably distinct feature of invention was relevant, and indeed necessary, to establish commercial success, and evidence was thus admissible to show commercial success as factor overcoming *prima facie* case that invention was obvious, in action for review of decision of Board of Patent Appeals and Interferences declaring patent invalid. 35 U.S.C.A. § 103.

[18] Courts  96(7)
106k96(7) Most Cited Cases

District court's denial of motion to transfer action for the convenience of parties and witnesses, in the interest of justice, was procedural matter, so review of that issue by Court of Appeals for the Federal Circuit was governed by law of the district court's regional circuit. 28 U.S.C.A. § 1404(a).

[19] Federal Courts  110
170Bk110 Most Cited Cases

Competitor was not entitled, in the interest of justice, to transfer of patent owner's action for review of administrative interference decision to district in which related actions had been stayed pending outcome of interference and instant action, as it was unclear that other forum would be more convenient, and action could likely be resolved more quickly if it was not transferred. 28 U.S.C.A. § 1404(a).

Patents  328(2)
291k328(2) Most Cited Cases

3,462,982, 4,738,127. Cited as prior art.

Patents  328(2)
291k328(2) Most Cited Cases

4,887,443. Cited.

Patents  328(2)
291k328(2) Most Cited Cases

4,935,047. Valid.

*1342 Kenneth A. Lapatine, Camhy Karinsky & Stein, of New York, New York, argued for plaintiff-appellee. Of counsel on the brief was Charles L. Gholz, Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

Joseph A. Yanny, Yanny, Grieco & Osher, of Los Angeles, California, argued for defendant-appellant. With him on the brief were Mary L. Grieco, and Michael A. DiNardo. Of counsel on the brief were Charles R. Wolfe, Jr., and Richard E. Fitcher, Bacon & Thomas, of Alexandria, Virginia.

Before MICHEL, RADER, and GAJARSA, Circuit Judges.

MICHEL, Circuit Judge.

Ching-Rong Wang ("Wang") appeals from the judgment of the United States District Court for the District of Columbia, overturning the decision of the United States Patent and Trademark Office Board of Patent Appeals and Interferences (the "Board") in an interference, and holding that the inventions of claims 2 and 4 of U.S. Patent No. 4,935,047 ("the '047 patent") and claims 9-11 of U.S. Patent App. No. 07/478,411 ("the '411 application") would not have been obvious in light of the cited prior art. See *Winner Int'l Royalty Corp. v. Wang*, 11 F.Supp.2d 18, 48 USPQ2d 1139 (D.D.C. June 12, 1998). The '047 patent, issued to Jinn Wu ("Wu"), and the '411 application are owned by Winner International Royalty Corp. ("Winner"). The district court had jurisdiction pursuant to 35 U.S.C. § 146 (1994) because Wu filed suit there after an adverse ruling by the Board in an interference between himself and Wang. Winner, as owner of Wu's patent, superseded Wu as plaintiff. The Board held the Wu patent and application claims invalid as obvious. See 35 U.S.C. § 103 (1994). Other litigation (including suit against Wang), in which Winner alleges infringement of its '047 patent and asserts several related claims, has been stayed in the Central District of California pending the outcome of this appeal. The district court first denied Wang's motion to transfer this action to the District Court for the Central District of California. See *Winner Int'l Royalty Corp. v. Wang*, 45 USPQ2d 1864, 1998 WL 268279 (D.D.C. Jan.20, 1998). Then it conducted a 7 day bench trial. On appeal, Wang challenges (1) the denial of the transfer; (2) rulings as to the admission of evidence despite its similarity to that before the Board; and (3) the holding of non-obviousness that revived the '047 patent. This case was submitted for our decision following oral argument on August 2, 1999. Because the district court did not clearly err in any of its factual findings relating to obviousness, did not err in its ultimate determination of non-obviousness, and

did not abuse its discretion either in admitting the challenged documentary evidence and testimony or in refusing to transfer the case, we affirm.

BACKGROUND

In addition to the '047 patent, Winner also owns U.S. Patent No. 4,738,127 ("Johnson"), the commercial embodiment of which is the original steering wheel anti-theft device known as "The Club." Wu, the principal in the Taiwanese manufacturer of the original Club, is named as the inventor in the '047 patent, commercial embodiments of which are known as "The Super Club," "The Ultra Club," and "The Club GL." The '047 patent discloses an automobile *1343 anti-theft device that is mounted across the steering wheel and is locked in place by use of a self-locking ratcheting mechanism. Like all versions of the Club, when locked in place, the commercial embodiments of the '047 patent prevent theft by blocking the steering wheel from turning. The ratcheting mechanism is different from the dead-bolt used in Johnson and so the '047 patent may be thought of as an improvement over Johnson. While Johnson's dead-bolt system is more secure, it is not as convenient as the ratcheting mechanism claimed in the '047 patent because a key is required to lock the Johnson device in place while the '047 patent discloses a device that locks itself without use of a key. [FN1]

FN1. In both devices a key is needed to unlock the device.

Wang also manufactures similar anti-theft devices in Taiwan and exports them to the U.S. where he sells them through his United States distributor. Wang's device is known commercially as "The Gorilla Grip." Wang filed a patent application directed to his Gorilla Grip device and was issued U.S. Patent No. 4,887,443 ("the '443 patent").

In 1990, Wu discovered that the device disclosed in Wang's '443 patent was very similar to the subject matter of his then-pending application, which later issued as the '047 patent, and decided to provoke an interference by filing a divisional application and submitting a claim identical to the broadest claim in the '443 patent. On August 8, 1991, an interference was declared, and a proceeding began to determine which party, Wu or Wang, had priority of invention. The claims of the '047 patent and an additional Wu application, the '411 application, were eventually

added to the count in the interference.

During the interference proceeding, Wang filed a preliminary motion alleging that the interference count, and hence both parties' claims, was unpatentable as obvious in light of certain prior art under 35 U.S.C. § 103 (1994). Wang, apparently acknowledging that his claim to priority over Wu's '047 patent was questionable, ultimately conceded that his '443 patent was invalid and sought to prove that Wu's '047 patent was also invalid.

After a final hearing, the Board, in a split decision, held all affected claims invalid except for claims 1 and 3 of the '047 patent. Wu then filed both an appeal to this court pursuant to 35 U.S.C. § 141 (1994) and an action in the District Court for the District of Columbia pursuant to 35 U.S.C. § 146, while Wang filed a section 146 action in the District Court for the Central District of California. In Wu's section 141 appeal from the decision of the Board, this court determined that the section 146 suit would proceed pursuant to Wu's complaint in the District Court for the District of Columbia. *See Wu v. Wang, 129 F.3d 1237, 44 USPQ2d 1641 (Fed.Cir.1997)*. Because Wu filed his appeal first, and responded in timely fashion to Wang's notice of election by filing a section 146 action in the District Court for the District of Columbia, Wu's choice of forum governed. *See id. at 1242-43, 44 USPQ2d at 1645-46*. We then dismissed the section 141 appeal as superseded by the section 146 action. *See id. at 1238, 44 USPQ2d at 1642*.

After the first appeal to this court, Wang filed a motion in the district court to transfer the action to the Central District of California. The district court denied the motion. *See Winner, 45 USPQ2d 1864*. After a seven-day bench trial, the district court held that the inventions of claims 2 and 4 of the '047 patent would not have been obvious in light of the cited prior art. *See Winner, 11 F.Supp.2d 18, 48 USPQ2d 1139. [FN2]* At trial, Winner presented testimony on each of the four principal factual issues underlying an obviousness *1344 determination, as well as affidavits. Wang presented one expert witness to testify as to his opinion regarding obviousness and the underlying factual determinations. The record before the Board was also admitted into evidence before the district court.

FN2. The related claims in the '411 application were also found not unpatentable, but were not separately

addressed by the district court and are not separately argued on appeal. Therefore, we do not address them separately either.

The focus of the trial was on four prior art references that Wang alleged, before the court as he had before the Board, rendered the invention of the '047 patent obvious. These references were Johnson (mentioned above), U.S. Patent No. 3,462,982 ("Moore"), Taiwan Patent App. No. 74,210,699 ("WuROC"), and French Patent App. No. 2,566,398 ("Grimaldi"). Winner also introduced evidence of the commercial success of its Super Club line of products. This evidence had not been presented to the Board.

Like the device disclosed in the '047 patent, the mechanism of Johnson immobilizes the steering wheel by the user inserting it within the steering wheel, telescoping its arms outward so that hooks on the end of the arms engage the steering wheel, and then locking the arms in place. As stated earlier, unlike the '047 patent, which discloses a self-locking ratcheting mechanism, Johnson uses a dead-bolt to lock the device in place, which requires the user to turn a key after putting the device on the wheel. Moore discloses a steering wheel lock that unfolds into a "Y" shape and utilizes a self-locking ratcheting mechanism, which does not require a key. WuROC discloses a wheel and brake pedal locking device with a versatile locking core that can accommodate either a dead-bolt or a self-locking ratcheting mechanism, but it does not disclose either of these locking mechanisms. Grimaldi discloses a two-piece mechanism for locking a clutch or brake pedal to the floorboard or firewall of a car and its figures appear to show a rod and pawl mechanism that locks it into place.

The key issue tried was the presence or absence of sufficient proof of a motivation to combine the four prior art references. The Board had found that one skilled in the art (1) "would have considered Johnson's dead-bolt-type locking device to be disadvantageous compared to the Moore and WuROC devices to the extent that Johnson requires a key for setting in position and adjusting the device," and (2) "would have been motivated to make Johnson easier to use, albeit less secure, by replacing the dead-bolt mechanism" of Johnson with a suitable self-locking ratcheting mechanism. The district court found that these factual findings were "clearly erroneous" and found that adequate motivation to combine the references was not shown. See Winner, 11 F.Supp.2d at 23-24, 48 USPQ2d at 1143-44. The

district court also found that Winner established commercial success resulting from the improvement claimed in the '047 patent, even though it held such a finding immaterial in light of Wang's failure to establish a prima facie case of obviousness. See id. Accordingly, the district court held that on this record the inventions of claims 2 and 4 of the '047 patent would not have been obvious and overturned the Board's decision as to those claims. See id. at 25, 48 USPQ2d at 1145.

Wang appeals, contending that the district court should have applied a substantial evidence standard of review on factual issues rather than, as it said it was doing, review for clear error. Wang asserts that the district court incorrectly concluded that the invention of the claims would not have been obvious, and abused its discretion in admitting the challenged documentary evidence and testimony as duplicative of evidence in the Board record and in denying Wang's motion to transfer the case to the Central District of California. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(3)(C) (1994).

DISCUSSION

I.

STANDARD OF REVIEW

[1][2] We review the district court's factual findings for clear error and its *1345 conclusions of law *de novo*, as with any bench trial. See Gould v. Quigg, 822 F.2d 1074, 1077, 3 USPQ2d 1302, 1303-04 (Fed.Cir.1987) (affirming district court's reversal of Board decision with respect to enablement). It is not as clear, however, what degree of deference inheres in the standard of review the district court was required to apply to the Board's decision. The parties agree that the district court was to reassess the Board's ultimate conclusion as to obviousness *de novo*, but they disagree over the degree of deference, if any, the district court was required to give to the Board's factual findings. Wang argues that under the Supreme Court's decision in Dickinson v. Zurko, 527 U.S. 150, 119 S.Ct. 1816, 144 L.Ed.2d 143 (1999), the district court was required to review the Board's factual findings only for substantial evidentiary support. In its decision, which issued before Zurko was decided, the district court applied the traditional clearly erroneous standard of review to the Board's findings of fact. [FN3] Winner argues first that the district court was entitled to conduct an entire trial *de novo*, and second, even if deference were required, that the district court properly reviewed the Board's factual findings for clear error because Zurko and the Administrative Procedure Act ("APA") standards of

review do not apply as the Board proceeding is "subject to" a trial *de novo* in a district court.

FN3. That standard of review was correct under our case law at the time.

Wu brought this action pursuant to 35 U.S.C. § 146, which allows a party to an interference dissatisfied with an adverse decision of the Board to file a complaint in a district court. Unlike a direct appeal to this court pursuant to 35 U.S.C. § 141, the parties before the district court are not limited to the evidentiary record before the Board:

In such suits the record in the Patent and Trademark Office shall be admitted on motion of either party ... without prejudice to the right of the parties to take *further testimony*. The testimony and exhibits of the record in the Patent and Trademark Office when admitted shall have the *same effect as if originally taken and produced in the suit*.

35 U.S.C. § 146 (emphasis added). Because the record before the district court may include the evidence before the Board as well as evidence that was not before the Board, we have often described the district court proceeding as "a hybrid of an appeal and a trial *de novo*." Estee Lauder Inc. v. L'Oreal, S.A., 129 F.3d 588, 592, 44 USPQ2d 1610, 1612 (Fed.Cir.1997); *see also General Instrument Corp. v. Scientific-Atlanta, Inc.*, 995 F.2d 209, 212, 27 USPQ2d 1145, 1147 (Fed.Cir.1993) ("[A] party may proceed to a district court for a hybrid appeal/trial *de novo* proceeding in which the PTO record is admitted on motion of either party, but it may be supplemented by further testimony. 35 U.S.C. § 146."); Case v. CPC Int'l, Inc., 730 F.2d 745, 752, 221 USPQ 196, 202 (Fed.Cir.1984) ("[A]n action under 35 U.S.C. § 146 has the hybrid nature of an appeal and a trial *de novo*."). We have so stated even though section 146 uses neither the term "*de novo*," nor "appeal." *See Conservolite, Inc. v. Widmayer*, 21 F.3d 1098, 1102, 30 USPQ2d 1626, 1629 (Fed.Cir.1994).

The issue before us is whether the scope of the evidence admitted by the district court was sufficient to require a complete trial *de novo*, or whether the district court was instead required to give deference to some or all of the Board's findings of fact. Although our precedent makes clear that a *de novo* trial is appropriate in some circumstances in actions under both section 146 and the parallel provisions in 35 U.S.C. § 145, it does not make clear exactly what those circumstances are. The statutory provisions

themselves offer little guidance--section 146 only refers to "further testimony" which may be offered in the district court, while section 145 is completely silent about evidence. *See 35 U.S.C. § 146*; 35 U.S.C. § 145. In Zurko, the Supreme Court, in passing, noted the settled law that in a section 145 action a disappointed applicant may present evidence *1346 that it did not present to the Board, and that the "presence of such *new* or *different* evidence makes a factfinder of the district judge." 119 S.Ct. at 1824 (emphasis added). Interpreting both sections, we have referred to the ability to present "new testimony" or "proffered testimony" or "additional evidence." Conservolite, 21 F.3d at 1102, 30 USPQ2d at 1629 ("new testimony"); Case, 730 F.2d at 752, 221 USPQ at 202 (finding that section 146 "authorizes the district court to accept all proffered testimony on issues raised by the parties during the proceedings below or by the board's decision."); Gould, 822 F.2d at 1079, 3 USPQ2d at 1305 ("[A]dditional evidence is permitted in a civil action under section 145, allowing the district court to make *de novo* fact findings."); Fregeau v. Mossinghoff, 776 F.2d 1034, 1038, 227 USPQ 848, 851 (Fed.Cir.1985) (using "additional evidence" and "new evidence" interchangeably); *cf. Newman v. Quigg*, 877 F.2d 1575, 1579, 11 USPQ2d 1340, 1343 (Fed.Cir.1989) ("A district court action under 35 U.S.C. § 145 is a *de novo* determination of patentability. It is not limited to the record before the PTO."). It is not clear from these cases, however, when evidence is "new or different" or "additional" so that trial *de novo* is required.

Here, Winner introduced evidence on the issue of commercial success that was not before the Board, specifically a survey and a witness. Such documentary evidence and testimony are certainly "further testimony," as the Board had neither before it in any form. However, Winner also presented live testimony in the district court on each factual issue before the Board, namely the other three sets of underlying factual determinations typically at issue in an obviousness determination. *See Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). Wang argues that this latter testimony was not adequate to trigger a *de novo* trial because it is the same or similar to testimony given by the same witnesses before the Board. We reject this argument.

In the context of a section 145 action, in which the Board has conducted an *ex parte* proceeding, we have noted that the admission of live testimony at trial requires the factfinder to make *its own* findings. *See*

Burlington Indus., Inc. v. Quigg, 822 F.2d 1581, 1584, 3 USPQ2d 1436, 1439 (Fed.Cir.1987). The rationale is that the applicant was at least partly unable to present the live testimony in the *ex parte* proceeding before the Board. *See id.* In *Burlington Industries*, the Commissioner argued that "the district court cannot reach a different conclusion on the *same evidence* that was before the PTO." *Id.* (emphasis added). We rejected the Commissioner's argument. Although the import of the evidence before the Board and the district court might be the same in many or all ways, the *form* in which it is presented is fundamentally different. As we noted in *Burlington Industries*:

In its evaluation of the evidence on which this conclusion was based, the district court had a powerful advantage over the patent examiner and the Board, an advantage characteristic of section 145 appeals, in that the court *heard* and *saw witnesses*, testifying under examination and cross-examination, and had the benefit of extensive discussion and argument.

Id. at 1582, 3 USPQ2d at 1437-38 (emphasis added). The fact that the district court heard live testimony, gave more weight to some witnesses than to others, and came to a different conclusion than that reached by the Board, was not improper:

This trial before the district court partook of the quality that is available only with the examination and cross-examination of *live witnesses*. ... If the evidence adduced before the district court led to a decision different from that reached by the PTO, that is not contrary to the legislative purpose of section 145 *de novo* review. Indeed, it is in fulfillment of that purpose.

Id. at 1584, 3 USPQ2d at 1439 (emphasis added). Thus, after a "full trial of the issues" the district court was free to come *1347 to its own "independent conclusion," contrary to the argument by the Commissioner. *Id.*; see also *Gould*, 822 F.2d at 1079, 3 USPQ2d at 1305 ("[O]nce a full trial on the issue occurred ... the district court reached a distinct and more informed conclusion....").

In the context of a section 146 action such as the instant case, in which the Board has conducted an *inter partes* interference proceeding, the matter is less clear because more evidentiary opportunities are available to parties in an interference than to an applicant in an *ex parte* examination and appeal to the Board. *See In re Epstein*, 32 F.3d 1559, 1565-66, 31 USPQ2d 1817, 1821 (Fed.Cir.1994) (noting lack of rules of evidence and inability to cross-examine witnesses in an *ex parte* proceeding). In an interference, unlike an *ex parte* proceeding, the

Federal Rules of Evidence apply. *See 37 C.F.R. § 1.671(b)* (1998). In addition, both sides can submit testimony, initially in the form of affidavits, unless the testimony must be compelled. *See 37 C.F.R. § 1.672*. A party may "cross-examine" an affiant through oral deposition. *See 37 C.F.R. § 1.672(d)*. Discovery, at least against the party opponent, is also available. *See 37 C.F.R. § 1.687*. However, although the parties "will be given an opportunity to appear before the Board to present oral argument at a final hearing," *37 C.F.R. § 1.654*, at no point in the interference proceeding is a party allowed to present live testimony before the Board. The Board reviews testimony only in the form of affidavits and transcripts of depositions, and other facts in the form of responses to interrogatories and requests for admissions. *See 37 C.F.R. §§ 1.653(a), 1.677(a)*. Thus, although the proceeding before the Board in an interference differs from that following an *ex parte* examination, the two proceedings are the same in at least one important respect--in no case is live testimony given before the Board, which would allow the Board to observe demeanor, to hear the witnesses rebut one another's testimony in response to questioning from the parties and the judges, and thus to determine credibility. As we have stated before, because the district court may observe witnesses under examination and cross-examination it can have a "powerful advantage" over the Board which can never receive testimony in such a manner. *Burlington Indus.*, 822 F.2d at 1582, 3 USPQ2d at 1437.

[3] We hold that the admission of live testimony on all matters before the Board in a section 146 action, as in this case, makes a factfinder of the district court and requires a *de novo* trial. [FN4] Thus, although the live testimony before the district court might be the same or similar to testimony before the Board in the form of affidavits and deposition transcripts, a district court should still make *de novo* factual findings, while treating the record before the Board when offered by a party "as if [it was] originally taken and produced" in the district court. *35 U.S.C. § 146*. Accordingly, because Winner submitted live testimony on all matters before the Board, the entire district court proceeding should have been a trial *de novo*, based both on the Board record and the district court evidence. [FN5]

FN4. As this case involved further testimony relating to everything in issue before the Board, we express no opinion on whether testimony relating solely to some facts or issues results in other facts or issues being

reviewed deferentially based solely on the fact findings of the Board. Indeed, we do not decide whether a given dispute could be parsed into discrete "issues" or facts so that such a determination could be made, or if it could, how a court would draw the line between such facts or issues.

FN5. The trial court's failure to apply the *de novo* standard, if error, was harmless error, for surely the result would have been the same under non-deferential review.

Our holding comports with the notion that "[t]he credibility of the witnesses and the weight to be given to their testimony and the other evidence in the record ... is a matter for the trier of facts." *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 552, 222 USPQ 4, 6 (Fed.Cir.1984). Further, our holding also establishes *1348 a clear rule that *live* testimony admitted on all matters that were before the Board triggers a *de novo* trial. If our holding were otherwise it might be difficult to administer. For example, if the test for determining whether *de novo* adjudication is appropriate were based on exactly what the witness said in the district court and whether it was truly "new or different" than what was disclosed in affidavits and deposition transcripts of the same or other witnesses before the Board, then the district court, and this court on appeal, would be required to search nearly line-by-line through the respective records as to each witness and issue to determine which standard applied. Aside from being difficult, such a test would provide scant guidance for a prospective litigant attempting to discern which standard would apply should it file a section 146 action.

II. OBVIOUSNESS

A.

[4][5] Obviousness is a question of law based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the prior art and the claimed invention; and (4) extent of any objective indicia of non- obviousness. See *Monarch Knitting Mach. Corp. v. Sulzer Morat Gmbh*, 139 F.3d 877, 881, 45 USPQ2d 1977, 1981 (Fed.Cir.1998). The ultimate determination of obviousness by a district court is reviewed by this court *de novo* while the underlying factual inquiries

are reviewed for clear error. See *Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 1331, 49 USPQ2d 1001, 1006 (Fed.Cir.1998). We hold that this is so as much in a section 146 action as on review of the judgment in an infringement suit.

[6][7] The dispute here focuses on the combinability of the prior art. When an obviousness determination is based on multiple prior art references, there must be a showing of some "teaching, suggestion, or reason" to combine the references. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed.Cir.1997) (also noting that the "absence of such a suggestion to combine is dispositive in an obviousness determination"). Whether motivation to combine the references was shown we hold a question of fact. See *In re Dembicza*, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed.Cir.1999) ("[P]articular *factual* findings regarding the suggestion, teaching, or motivation to combine serve a number of important purposes") (emphasis added); *Monarch Knitting*, 139 F.3d at 881-83, 886, 45 USPQ2d at 1982, 1985 (treating motivation to combine issue as part of the scope and content of the prior art and holding that genuine issues of *fact* existed as to whether one of ordinary skill in the art would have been motivated to combine the references in question).

[8][9] Evidence of a suggestion, teaching, or motivation to combine prior art references may flow, *inter alia*, from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. See *Dembicza*, 175 F.3d at 999, 50 USPQ2d at 1617. Although a reference need not expressly teach that the disclosure contained therein should be combined with another, see *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472, 43 USPQ2d 1481, 1489 (Fed.Cir.1997), [FN6] the showing of *1349 combinability, in whatever form, must nevertheless be "clear and particular." *Dembicza*, 175 F.3d at 999, 50 USPQ2d at 1617.

FN6. Wang correctly points out that the district court misstated our case law on the test for the "motivation to combine" issue when it stated that "there must have been some *explicit* teaching or suggestion in the art to motivate one of even ordinary skill to combine such elements so as to create the same invention." *Winner*, 11 F.Supp.2d at 24, 48 USPQ2d at 1144 (emphasis added). However, this misstatement could not have

affected its analysis because its finding of a lack of motivation to combine was based on "teaching away" and the nature of the problem confronting one of ordinary skill in the art, not what a reference failed to explicitly disclose. The district court also stated the law on this issue correctly in other portions of the opinion, so this one isolated misstatement hardly shows that the district court misunderstood the law.

B.

[10] Like the district court's opinion, the arguments of both parties on appeal focus on whether one of ordinary skill would have been motivated to combine the four references. The key references at issue were Johnson, which discloses virtually all aspects of the invention claimed in the '047 patent except ratcheting, and Moore, which did disclose a self-locking ratcheting mechanism. [FN7] If there was no motivation or suggestion to combine Johnson with the ratcheting mechanism of Moore, one of ordinary skill in the art would not have viewed the invention of the '047 patent as obvious. See *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed.Cir.1998); *Gambro Lundia AB*, 110 F.3d at 1579, 42 USPQ2d at 1383 ("The absence of such a suggestion to combine is dispositive in an obviousness determination.").

FN7. WuROC, which disclosed a chamber capable of accepting either a dead-bolt or a ratcheting mechanism, may have informed one of ordinary skill in the art that both mechanisms would work, but it did not specifically disclose any such mechanisms and did not suggest that one should be replaced with the other. Grimaldi disclosed a rod and pawl design that was an anti-theft device attached to the clutch rather than a steering wheel. The district court did not clearly err in finding that "WuROC and Grimaldi in and of themselves would certainly not provide much guidance as to how to construct the Wu '047 device" and that if Johnson was not combined "with some form of a ratchet mechanism, then the fact that Wu '047 may have borrowed some elements from WuROC and Grimaldi becomes irrelevant." *Winner*, 11 F.Supp.2d at 24, 48 USPQ2d at 1144.

Wang argues that the prior art should be combinable merely because the Board properly found that the relevant field was very broad and included lock design art in general, and all of the prior art here was clearly within that field. Wang further argues that Moore is combinable with Johnson because they both deal with locking steering wheels, even though Moore's ratcheting mechanism is possibly not as strong or as tamper resistant as the dead-bolt mechanism of Johnson, partly because the grooves of the ratcheting mechanism are at least somewhat exposed.

[11] The district court found that there was no motivation to combine Johnson with the ratcheting mechanism of Moore because (1) there was no apparent disadvantage to the dead-bolt mechanism of Johnson, and therefore the motivation to combine would not stem from the "nature of the problem" facing one of ordinary skill in the art, because no "problem" was perceived; and (2) Johnson's written description taught away from the use of Moore. See *Winner*, 11 F.Supp.2d at 23, 48 USPQ2d at 1143-44. "What a reference teaches and whether it teaches toward or away from the claimed invention are questions of fact." *In re Bell*, 991 F.2d at 784, 26 USPQ2d at 1531.

First, although there was conflicting evidence before the district court on whether one would see the trade-off between using a dead-bolt and using a ratcheting mechanism and conclude that the more secure dead-bolt should be replaced with the more convenient ratcheting mechanism, the district court did not clearly err in finding that one of ordinary skill in the art would not have reasonably elected trading the benefit of security for that of convenience. Trade-offs often concern what is feasible, not what is, on balance, desirable. Motivation to combine requires the latter. [FN8]

FN8. The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.

[12] Second, if Johnson did in fact teach away from Moore, then that finding *1350 alone can defeat Wang's obviousness claim. See *Gambro Lundia AB*,

110 F.3d at 1579, 42 USPQ2d at 1383. A "reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." In re Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed.Cir.1994).

The passage of Johnson relied on by the district court and Winner includes the following:

Another problem with such devices is that they appear susceptible to being overcome by physical force or manipulation. The locking mechanisms of [Moore] and Mitchell et al U.S. Pat. No. 4,103,524 are exposed, and include pry points thereabout in which a crowbar may be inserted in an attempt to overcome such mechanism. Irrespective of whether such device can be overcome by physical manipulation, they present prospective thieves with the appearance of being breakable.

Johnson, col. 1, lines 38-48. Because the Mitchell reference cited in the quote above actually does *not* utilize a ratcheting mechanism, Wang argues that Johnson does not teach away from using ratcheting mechanisms; rather, it was merely distinguishing prior art devices on the basis that unlike Johnson they had *exposed* mechanisms. However, that fact does not undermine the district court's finding that Johnson did teach away from the ratcheting mechanism of Moore which does have exposed grooves. While we regard this as a close factual issue, we hold that the district court did not clearly err in finding that Johnson taught away from Moore, and therefore was not shown to be combinable with Moore. Because the district court did not clearly err in finding that one of ordinary skill would not be motivated to combine Johnson and Moore, the district court correctly concluded that Wang did not establish a prima facie case of obviousness by clear and convincing evidence. See In re Dance, 160 F.3d at 1343, 48 USPQ2d at 1637.

[13] If Wang had succeeded in establishing a prima facie case of obviousness based on the first three obviousness factors, the burden of production would have shifted to Winner. See In re Huang, 100 F.3d 135, 139, 40 USPQ2d 1685, 1689 (Fed.Cir.1996); Burlington Indus., 822 F.2d at 1582-83, 3 USPQ2d at 1437-38 (reviewing a section 145 decision and holding that district court correctly concluded that applicant had successfully rebutted Commissioner's prima facie case of obviousness). Relevant to that inquiry would have been such objective indicia of non-obviousness as the evidence of commercial success submitted by Winner. See *id.* Because

Wang failed to establish a *prima facie* case of obviousness, however, Winner was not required to establish commercial success. Thus, we need not review the district court's finding that commercial success was established.

[14] Assuming, *arguendo*, *prima facie* proof of obviousness, we do not believe the district court clearly erred in finding commercial success or that it erred in concluding that it overcame the other *Graham* factors. It is presumed that Winner established a nexus between its commercial sales of the Super Club, the Club GL and Ultra Club and the patented features because they embody the disclosure of the '047 improvement patent. J.T. Eaton & Co. v. Atlantic Paste & Glue Co., 106 F.3d 1563, 1571, 41 USPQ2d 1641, 1647 (Fed.Cir.1997) ("When a patentee can demonstrate commercial success, usually shown by significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent, it is presumed that the commercial success is due to the patented invention."). Moreover, the survey introduced at the district court by Winner established that a statistically significant percentage of customers viewed the self-locking ratcheting mechanism of the '047 patent as being of more value to them, and reported that the self-locking ratchet was the very reason they purchased the device, as opposed to *1351 those requiring key-locking, and was the reason they were willing to pay more for such a lock than for one without it, such as the original Club. When such evidence was introduced, it became Wang's burden to show that it should not be given weight. See *id.* ("If a patentee makes the requisite showing of nexus between commercial success and the patented invention, the burden shifts to the challenger to prove that the commercial success is instead due to other factors extraneous to the patented invention, such as advertising or superior workmanship."); Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1394, 7 USPQ2d 1222, 1227 (Fed.Cir.1988) ("A patentee is not required to prove as part of its *prima facie* case that the commercial success of the patented invention is not due to factors other than the patented invention."). Given the evidence before the district court, it did not clearly err in finding that the survey showed the nexus between the patented features, especially the keyless self-locking ratcheting mechanism, of the Super Club line of products and the reasons the consumers bought the products. Nor did Wang's evidence overcome the proof of nexus.

III.

EVIDENTIARY ISSUES

[15] A district court's decision to admit or exclude evidence at trial is reviewed for abuse of discretion. *See Conservolite*, 21 F.3d at 1103, 30 USPQ2d at 1630 (Fed.Cir.1994). Wang argues that the district court abused its discretion by allowing Winner to present (1) late-disclosed witnesses and (2) documents and testimony pertaining to the nexus required to show commercial success, namely a survey and foundational witnesses for the survey. Wang admits that the commercial success issue was raised before the Board but argues that the subsidiary nexus issue was not, and therefore Winner could not raise the issue before the district court, as it must be deemed waived.

Winner points out that Wang never even identifies which witnesses should not have been allowed to testify as "late-disclosed." With respect to the evidence of commercial success, Winner argues that the nexus evidence was clearly admissible because commercial success was at issue before the Board and, therefore by implication, the nexus issue was as well.

[16] We agree with Winner that the district court did not abuse its discretion in allowing allegedly late-disclosed witnesses to testify. Such witnesses were never even identified by Wang in his opening brief, and, after Winner pointed this out in its response brief, Wang still failed to identify the witnesses in his reply brief. Under such circumstances, we will not search the record on the chance of discovering which witnesses Wang was complaining of and then determine whether the district court abused its discretion. Thus, whichever witnesses Wang was alluding to, admission of their testimony cannot be said to be an abuse of discretion based on the vague arguments made by Wang on appeal.

[17] We also agree with Winner that the district court did not abuse its discretion in admitting the new testimony and survey report regarding the nexus between commercial success and the patentably distinct feature of the claimed invention. Wang's argument, based on a distinction between the issues of commercial success and nexus, is flawed. The evidence showing a nexus between large sales and the patentable features of the invention of the '047 improvement patent is at least *relevant to* the issue of commercial success before the Board. *See Estee Lauder*, 129 F.3d at 592, 44 USPQ2d at 1613 ("[D]istrict court did not abuse its discretion in allowing Estee Lauder to introduce evidence of the

[tests not before the Board] insofar as this evidence was *relevant to* its reduction to practice." (emphasis added)). Indeed, establishing such a nexus is required in order to establish commercial success. *See Gambo Lundia*, 110 F.3d at 1579, 42 USPQ2d at 1384 ("Of course, *1352 the record must show a sufficient nexus between this commercial success and the patented invention"). Thus, here raising the commercial success issue necessarily raised the nexus issue as well. Accordingly, the district court did not abuse its discretion by admitting the testimony and documents relating to the nexus required to show commercial success.

IV. MOTION TO TRANSFER

[18] A district court may transfer an action to another district court for the "convenience of parties and witnesses, in the interest of justice." 28 U.S.C. § 1404(a) (1994). Our review of the district court's denial of Wang's motion to transfer, as a procedural matter, is governed by the law of the regional circuit in which it sits, here the United States Court of Appeals for the District of Columbia Circuit. *See Stewart Org., Inc. v. Ricoh Corp.*, 487 U.S. 22, 32, 108 S.Ct. 2239, 101 L.Ed.2d 22 (1988) (classifying section 1404(a) as a procedural rule); *Regents of the Univ. of Cal. v. Eli Lilly and Co.*, 119 F.3d 1559, 1565, 43 USPQ2d 1398, 1403 (Fed.Cir.1997) (applying regional circuit law). In that circuit, the burden of persuasion on the transfer issue was on Wang, and the district court's denial of Wang's motion is reviewed for an abuse of discretion. *See Securities and Exchange Comm'n v. Savoy Indus., Inc.*, 587 F.2d 1149, 1154 (D.C.Cir.1978).

[19] Wang argues that the district court should have granted his motion to transfer this action to the District Court for the Central District of California, where several other cases have been stayed pending the outcome of the interference and this action because to do so would be convenient to the parties and in the interests of justice. Winner argues, however, that it was just as convenient for the parties to litigate in Washington, D.C. as in California, and that the interests of justice actually favored litigation in Washington, D.C. because this aspect of the litigation will be resolved years before it would have been if the motion to transfer were granted.

We discern no abuse of discretion in the district court's denial of Wang's motion to transfer. Even though there are several related pending cases in the Central District of California, it is not clear that it

would be a more convenient location for the parties to litigate. Persons scheduled to testify at trial for the parties lived in Pennsylvania; the experts lived in Connecticut, Virginia, and California; and the attorneys were from Virginia and New York. With parties, witnesses, and attorneys coming from such varied locations, several of which are closer to Washington, D.C. than California, it could not easily be said that it would be more convenient to try the case in the Central District of California. In addition, the interests of judicial economy were well served because the section 146 action was tried and result obtained in just six months after the motion to transfer was denied--presumably much more quickly than would have been the case if this action were transferred to the Central District of California where several other cases were pending. *See Savoy Indus., 587 F.2d at 1156* (considering the delay that would have been encountered if the motion to transfer were granted as a factor weighing in favor of denying the motion). Under such circumstances, the district court did not abuse its discretion in denying Wang's motion to transfer.

**V.
CONCLUSION**

The district court did not clearly err in its findings of fact with respect to its obviousness analysis and did not err in concluding that the invention of the '047 patent' would not have been obvious. In addition, the district court did not abuse its discretion in admitting testimony and documents or in refusing to transfer the *1353 case. Accordingly, the judgment of the district court is

AFFIRMED.

202 F.3d 1340, 53 U.S.P.Q.2d 1580

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• [1999 WL 33606855 \(Appellate Brief\) Brief for Plaintiff-Appellee Winner International Royalty Corporation \(Feb. 09, 1999\)](#) (Appellate Brief) Brief for Plaintiff-Appellee Winner International Royalty Corporation (Feb. 09, 1999) Original Image of this Document (PDF)

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